HSG community solar project – FAQ

What is the HSG community solar project?

The community solar project emerged from a student-led initiative in the context of the Master's certificate program Managing Climate Solutions (MaCS-HSG) of the University of St.Gallen. The project consists of 521 solar photovoltaic panels co-owned by a community of 112 HSG students, professors, staff, alumni, and citizen investors from St.Gallen and other parts of Switzerland, in partnership with the Swiss solar company Solarify. The project located on the HSG sports hall was successfully commissioned in November 2023. It provided the chance for the HSG community to take concrete action in tackling one of the most pressing societal challenges of our times: climate change.

How was the project initiated and realized?

The project was initiated and developed by three cohorts of MaCS-HSG students over a period of three years, with mentoring from the programme's academic director, Prof. Dr. Rolf Wüstenhagen and support from Markus Steiner, Head of Construction and Technology at the HSG, and Luzia Engler Wirth, Head of Legal Services, throughout the project development.

The first cohort of MaCS-HSG students (2020/2021) investigated potentially suitable roofs and financing models. They also launched a <u>petition</u> to the canton of St.Gallen which was signed by 475 individuals.

The second cohort of MaCS-HSG students (2021/2022) further specified the project on the university sports hall and identified potential contractors for its implementation. They also launched a first attempt at a <u>crowdfunding campaign</u> in summer of 2022. 157 donors were willing to commit 25'653 CHF, but since this fell short of the students' target, the supporters received their money back.

The third cohort of MaCS-HSG students (2022/2023) built on the learnings of the previous two groups and identified Solarify as a suitable partner with professional expertise in solar crowd financing campaigns, and in managing the development and operation of rooftop solar installations. As a result, the Canton of St.Gallen as the building owner, the University and Solarify signed agreements for using the roof for the solar installation and procuring the electricity.

The successful crowd financing campaign was initiated in June 2023 via the platform <u>solarify.ch</u>. A total of 521 panels were put for sale for 965 CHF (incl. VAT) per unit. The students conducted a broad marketing campaign to promote the panel's sale, targeting HSG students, employees, alumni, and other members of the HSG community. In addition, Solarify promoted the project to customers throughout Switzerland. By October 20, 2023, all panels had been sold to 111 private individuals and companies, contributing to raising a total of approximately half a million Swiss francs. Nearly a third of the panels are owned by individuals residing in the St.Gallen region, the rest being based elsewhere in Switzerland.

Helion Energy AG was commissioned by Solarify to do engineering, procurement, and construction (EPC) work. The project was commissioned in November 2023. It is expected to produce approximately 198'000 kWh per year, representing nearly 85% of the building's power consumption.

Who is involved?

Project initiators: three subsequent cohorts of MaCS-HSG students, in total 36 students, with mentoring from Prof. Dr. Rolf Wüstenhagen, Markus Steiner, and Luzia Engler Wirth.

Students in the 1st MaCS cohort (2020/2021)

Solar Awareness Team	Solar Financing Models	PV Roof	Solar Politics	Solar Art
Lavinia Gentsch	Cara Stromeyer	Christopher Douillet	Thomas Huldi	Virginie Cauderay
Sarah Rickenbacher	Mark Bauer	Vasco Wüst	Patrick Zbinden	Laura Neufeldt-Schoeller
Sonja Thomi	Matthias Daum	Elsa Devaux	Martina Rothenberger	Sandra Ramme
	Paul Kreutzer			Valentina Siervo
	Stefano Ferrazini			

Students in the 2nd MaCS cohort (2021/2022)

Roof Management	Fund Management	Markeint and Investor relations
Conradin Meili	Matthias Blank	Severin Koch
Céline Pfister	Bruno Breitenstein	Eloise Azzola
Matthias Lüthard	Silas Bleisch	Jeppe Tranekaer
Yannick Käser	Carla Allen	Janik Schellenberger
Elena Stetter		

Students in the 3rd MaCS cohort (2022/2023)

Solar Crowdfunding		
Weiqi Liu		
Jonathan Meyer		
Simona Weber		
Nadja Koster		
Ines Morales Wyden		

Building owner: Canton of St.Gallen, Building department (represented by Mathias Humm)

Building operator: University of St.Gallen

Solar community co-owners: 112 private individuals and companies.

Project development and management: Solarify

Engineering, procurement, and construction (EPC contractor): Helion Energy AG

How is it contributing to HSG's sustainability strategy?

Like more than 1'000 other higher education institutions around the world, the University of St.Gallen has committed to reach net zero emissions by 2030. Transitioning away from fossil fuels towards low-carbon, renewable energy is a key lever to contribute to this target. The solar community project increases the share of renewable electricity generated on campus. Its innovative financing structure, co-creating the project with different members of the HSG community and beyond, shows the potential of collaborative approaches to climate action.

How do the panel owners and HSG benefit from the project?

As the operator of the solar plant, Solarify manages the marketing of the solar power produced. The electricity consumed directly on site can be consumed by HSG at a fixed rate. This means that it is less exposed to price fluctuations on the electricity market and benefits from electricity price in the long term. The surplus electricity is fed into the local grid and remunerated at the electricity company's current feed-in tariff. Solarify deducts provisions for the maintenance and insurance of the system directly from this gross income generated from the electricity sale. Every quarter, 90% of the net income is paid out to the individual panel owners on a pro rata basis. The remaining 10% represents Solarify's management fee. With these regular pay-outs, the participating panel owners earn a small return on their original investment.

Technical data

Project location: On the rooftop of the HSG gym – Höhenweg 14 – 9000 St. Gallen

Annual consumption of the building: 234'000 kWh (2022)

Size of the system: 521 solar PV panels

Installed capacity: 210.7 kWp

Expected annual solar PV production: 198'000 kWh (consumption of 44 Swiss households). The panels will supply 80-85% of the power consumption of the building annually.

Project scope: approx. CHF 439'000

Expected return on investment for citizen investors: 1-3% p.a. (over 30 years)

For additional information

- <u>https://www.macs.unisg.ch</u>
- <u>https://www.macsprojectsunisg.ch/solarize-hsg-en.html</u>
- <u>https://solarify.ch/HSG</u>
- <u>https://sustainability.unisg.ch/climate/</u>